

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method comprising ~~the steps of:~~
(a) —receiving at an Identity System a request for a certificate related action for a user; and
(b) —retrieving by the Identity System a workflow for responding to said request from a set of workflows, wherein said set of workflows includes a plurality of workflows for responding to said certificate related action, ~~and~~ wherein each workflow in said plurality of workflows corresponds to a different set of characteristics for a user, ~~and~~ wherein said workflow for responding to said request corresponds to said certificate related action and a set of characteristics for said user from an identity profile maintained by the Identity System ~~and, the set of characteristics including a user type, and wherein retrieving the workflow further comprises selecting the workflow from the plurality of workflows based on the requested certificate related action and the user type.~~
2. (Canceled)
3. (Previously Presented) The method of claim 1, wherein a first workflow in said plurality of workflows contains a first set of directives and a second workflow in said plurality of workflows contains a second set of directives, wherein said first set of directives is different from said second set of directives.
4. (Original) The method of claim 3, wherein said certificate related action is a certificate enrollment action, wherein said first workflow in said plurality of workflows calls

for obtaining an approval before issuing a certificate and wherein said second workflow in said plurality of workflows does not call for obtaining an approval before issuing a certificate.

5. (Original) The method of claim 3, wherein said certificate related action is a certificate renewal action, wherein said first workflow in said plurality of workflows calls for retrieving an approval before renewing a certificate and wherein said second workflow in said plurality of workflows does not call for retrieving an approval before renewing a certificate.

6. (Original) The method of claim 3, wherein said certificate related action is a certificate revocation action.

7. (Currently Amended) The method of claim 3, further ~~including the step of~~ comprising:

(e)——receiving said plurality of workflows.

8. (Currently Amended) The method of claim 1, ~~wherein said method further includes the step of~~ further comprising:

(d)——performing said workflow, wherein ~~said step (d) includes the steps of~~ performing said workflow comprises:

(1)——retrieving an approval response; and

(2)——obtaining a certificate.

9. (Currently Amended) The method of claim 8, further ~~including the steps of~~ comprising:

(e)——receiving a second request for a second certificate related action for a second user;

(f)——retrieving a second workflow for responding to said second request from said set of workflows, wherein said second workflow corresponds to said second certificate related action and a set of characteristics for said second user; and

(g) — performing said second workflow, wherein ~~said step (g) includes the step of performing said second workflow comprises:~~

(1) — obtaining a second certificate without retrieving an approval response.

10. (Original) The method of claim 9, wherein said certificate related action is a certificate enrollment action and said second certificate related action is a certificate enrollment action.

11. (Original) The method of claim 9, wherein said certificate related action is a certificate renewal action and said second certificate related action is a certificate renewal action.

12. (Currently Amended) The method of claim 1, further ~~including the step of~~ comprising:

(h) — performing said workflow, wherein said certificate related action is a certificate enrollment action and wherein ~~said step (h) includes the step of performing said workflow comprises:~~

(1) — obtaining a certificate, wherein ~~said step (h)(1) includes the steps of obtaining the certificate comprises~~

(i) — authenticating said user;

(ii) — forwarding said request to a Certificate Processing Server;

(iii) — receiving said certificate; and

(iv) — storing said certificate.

13. (Currently Amended) The method of claim 1, further ~~including the step of~~ comprising:

(j) — performing said workflow, wherein said certificate related action is a certificate renewal action and wherein ~~said step (j) includes the step of performing said workflow comprises:~~

(1)——obtaining a certificate renewal, wherein ~~said step (j)(1) includes the steps of obtaining the certificate renewal comprises:~~

- (i)——authenticating said user;
- (ii)——forwarding said request to a Certificate Processing Server;
- (iii)——receiving a certificate renewal acknowledgement.

14. (Currently Amended) The method of claim 1, further ~~including the step of~~ comprising:

(k)——performing said workflow, wherein said certificate related action is a certificate revocation action and wherein ~~said step (k) includes the step of performing said workflow comprises:~~

(1)——revoking a certificate, wherein ~~said step (k)(1) includes the steps of revoking the certificate comprises:~~

- (i)——authenticating said user; and
- (ii)——forwarding said request to a Certificate Processing Server.

15. (Canceled)

16. (Currently Amended) One or more processor readable storage devices having processor readable code embodied on said processor readable storage devices, said processor readable code for programming one or more processors to perform a method ~~comprising the steps of:~~

(a)——receiving at an Identity System a request for a certificate related action for a user; and

(b)——retrieving by the Identity System a workflow for responding to said request from a set of workflows, wherein said set of workflows includes a plurality of workflows for responding to said certificate related action, ~~and~~ wherein each workflow in said plurality of workflows corresponds to a different set of characteristics for a user, ~~and~~ wherein said workflow for responding to said request corresponds to said certificate related action and a set of

characteristics for said user from an identity profile maintained by the Identity System ~~and, the~~
set of characteristics including a user type, and wherein retrieving the workflow further
comprises selecting the workflow from the plurality of workflows based on the requested
certificate related action and the user type.

17. (Canceled)

18. (Previously Presented) One or more processor readable storage devices according to claim 16, wherein a first workflow in said plurality of workflows contains a first set of directives and a second workflow in said plurality of workflows contains a second set of directives, wherein said first set of directives is different from said second set of directives.

19. (Original) One or more processor readable storage devices according to claim 18, wherein said certificate related action is a certificate enrollment action, wherein said first workflow in said plurality of workflows calls for obtaining an approval before issuing a certificate and wherein said second workflow in said plurality of workflows does not call for obtaining an approval before issuing a certificate.

20. (Currently Amended) One or more processor readable storage devices according to claim 18, wherein said method further ~~includes the step of~~ comprises:

(e)——receiving said plurality of workflows.

21. (Currently Amended) One or more processor readable storage devices according to claim 16, wherein said method further ~~includes the steps of~~ comprises:

(d)——performing said workflow, wherein ~~said step (d) includes the steps of~~
performing said workflow comprises:

(1)——retrieving an approval response; and

(2)——obtaining a certificate;

(e)——receiving a second request for a second certificate related action for a second user;

(f)——retrieving a second workflow for responding to said second request from said set of workflows, wherein said second workflow corresponds to said second certificate related action and a set of characteristics for said second user; and

(g)——performing said second workflow, wherein ~~said step (g) includes the step of performing said second workflow~~ comprises:

(1)——obtaining a second certificate without retrieving an approval response.

22. (Original) One or more processor readable storage devices according to claim 21, wherein said certificate related action is a certificate enrollment action and said second certificate related action is a certificate enrollment action.

23. (Currently Amended) One or more processor readable storage devices according to claim 16, wherein said method further ~~includes the step of~~ comprises:

(h)——performing said workflow, wherein said certificate related action is a certificate enrollment action and wherein ~~said step (h) includes the step of performing said workflow~~ comprises:

(1)——obtaining a certificate, wherein ~~said step (h)(1) includes the steps of obtaining the certificate~~ comprises:

- (i)——authenticating said user;
- (ii)——forwarding said request to a Certificate Processing Server;
- (iii)——receiving said certificate; and
- (iv)——storing said certificate.

24. (Currently Amended) One or more processor readable storage devices according to claim 16, wherein said method further ~~includes the step of~~ comprises:

(j)——performing said workflow, wherein said certificate related action is a certificate renewal action and wherein ~~said step (j) includes the step of performing said workflow~~ comprises:

(1) — obtaining a certificate, wherein ~~said step (j)(1) includes the steps~~
obtaining the certificate comprises

(i) — authenticating said user;

(ii) — forwarding said request to a Certificate Processing Server;

and

(iii) — receiving a certificate renewal acknowledgement.

25. (Currently Amended) One or more processor readable storage devices
according to claim 16, wherein said method further ~~includes the step of~~ comprises:

(k) — performing said workflow, wherein said certificate related action is a
certificate revocation action and wherein ~~said step (k) includes the step of~~ performing said
workflow comprises:

(1) — revoking a certificate, wherein ~~said step (k)(1) includes the steps of~~
revoking the certificate comprises:

(i) — authenticating said user; and

(ii) — forwarding said request to a Certificate Processing Server.

26. (Canceled)

27. (Currently Amended) An apparatus comprising:

one or more communications interfaces;

one or more storage devices; and

one or more processors in communication with said one or more storage devices
and said one or more communication interfaces, said one or more processors perform a method
comprising ~~the steps of:~~

(a) — receiving at an Identity System a request for a certificate related action for
a user; and

(b) — retrieving by the Identity System a workflow for responding to said
request from a set of workflows, wherein said set of workflows includes a plurality of workflows

for responding to said certificate related action, ~~and~~ wherein each workflow in said plurality of workflows corresponds to a different set of characteristics for a user, ~~and~~ wherein said workflow for responding to said request corresponds to said certificate related action and a set of characteristics for said user from an identity profile maintained by the Identity System ~~and~~, the set of characteristics including a user type, and wherein retrieving the workflow further comprises selecting the workflow from the plurality of workflows based on the requested certificate related action and the user type.

28. (Canceled)

29. (Previously Presented) The apparatus of claim 27, wherein a first workflow in said plurality of workflows contains a first set of directives and a second workflow in said plurality of workflows contains a second set of directives, wherein said first set of directives is different from said second set of directives.

30. (Original) The apparatus of claim 29, wherein said certificate related action is a certificate enrollment action, wherein said first workflow in said plurality of workflows calls for obtaining an approval before issuing a certificate and wherein said second workflow in said plurality of workflows does not call for obtaining an approval before issuing a certificate.

31. (Currently Amended) The apparatus of claim 29, wherein said method further ~~includes the step of~~ comprises:

(e)——receiving said plurality of workflows.

32. (Currently Amended) The apparatus of claim 27, wherein said method further ~~includes the steps of~~ comprises:

(d)——performing said workflow, wherein ~~said step (d) includes the steps of~~ performing said workflow comprises:

(1)——retrieving an approval response; and

(2)——obtaining a certificate;

(e)——receiving a second request for a second certificate related action for a second user;

(f)——retrieving a second workflow for responding to said second request from said set of workflows, wherein said second workflow corresponds to said second certificate related action and a set of characteristics for said second user; and

(g)——performing said second workflow, wherein ~~said step (g) includes the step of performing said second workflow comprises:~~

(1)——obtaining a second certificate without retrieving an approval response.

33. (Original) The apparatus of claim 32, wherein said certificate related action is a certificate enrollment action and said second certificate related action is a certificate enrollment action.

34. (Currently Amended) The apparatus of claim 27, wherein said method further ~~includes the step of~~ comprises:

(h)——performing said workflow, wherein said certificate related action is a certificate enrollment action and wherein ~~said step (h) includes the step of~~ performing said workflow comprises:

(1)——obtaining a certificate, wherein ~~said step (h)(1) includes the steps of obtaining the certificate comprises:~~

(i)——authenticating said user;

(ii)——forwarding said request to a Certificate Processing Server;

(iii)——receiving said certificate; and

(iv)——storing said certificate.

35. (Currently Amended) The apparatus of claim 27, wherein said method further ~~includes the step of~~ comprises:

(j)——performing said workflow, wherein said certificate related action is a certificate renewal action and wherein ~~said step (j) includes the step of performing said workflow~~ comprises:

(1)——obtaining a certificate, wherein ~~said step (j)(1) includes the steps of obtaining the certificate~~ comprises:

(i)——authenticating said user;

(ii)——forwarding said request to a Certificate Processing Server;

and

(iii)——receiving a certificate renewal acknowledgement.

36. (Currently Amended) The apparatus of claim 27, wherein said method further ~~includes the step of~~ comprises:

(k)——performing said workflow, wherein said certificate related action is a certificate revocation action and wherein ~~said step (k) includes the step of performing said workflow~~ comprises:

(1)——revoking a certificate, wherein ~~said step (k)(1) includes the steps of revoking the certificate~~ comprises:

(i)——authenticating said user; and

(ii)——forwarding said request to a Certificate Processing Server.

37. (Canceled)

38. (Currently Amended) A method comprising ~~the steps of:~~

(a)——receiving a request for a certificate related action for a user; and

(b)——retrieving a workflow for responding to said request from a set of

workflows,

wherein said workflow corresponds to said certificate related action and a set of characteristics for said user,

wherein said set of workflows includes a plurality of workflows for responding to said certificate related action, ~~and~~

wherein each workflow in said plurality of workflows corresponds to a different set of characteristics for a user[[]], ~~and~~

wherein retrieving the workflow for responding to said request further comprises selecting the workflow from the plurality of workflows based on the requested certificate related action and a user type of the user.

39. (Currently Amended) The method of claim 38, further ~~including the step of comprising:~~

(e)——receiving said plurality of workflows.

40. (Currently Amended) The method of claim 38, ~~wherein said method further includes the steps of comprising:~~

(d)——performing said workflow, wherein ~~said step (d) includes the steps of performing said workflow comprises:~~

(1)——retrieving an approval response; and

(2)——obtaining a certificate;

(e)——receiving a second request for a second certificate related action for a second user;

(f)——retrieving a second workflow for responding to said second request from said set of workflows, wherein said second workflow corresponds to said second certificate related action and a set of characteristics for said second user; and

(g)——performing said second workflow, wherein ~~said step (g) includes the step of performing said second workflow comprises:~~

(1)——obtaining a second certificate without retrieving an approval response.

41. (Original) The method of claim 40, wherein said certificate related action and said second certificate related action call for the same certificate related action.

42. (Currently Amended) The method of claim 40, wherein ~~said steps (a), (b), (d), (e), (f), and (g)~~ receiving the request, retrieving the workflow, performing the workflow, receiving the second request, retrieving the second workflow, and performing the second workflow are performed by an Identity System in communication with an Access System.

43. (Currently Amended) One or more processor readable storage devices having processor readable code embodied on said processor readable storage devices, said processor readable code for programming one or more processors to perform a method comprising the steps of:

(a)——receiving a request for a certificate related action for a user; and

(b)——retrieving a workflow for responding to said request from a set of workflows,

wherein said workflow corresponds to said certificate related action and a set of characteristics for said user,

wherein said set of workflows includes a plurality of workflows for responding to said certificate related action, ~~and~~

wherein each workflow in said plurality of workflows corresponds to a different set of characteristics for a user[[]], and

wherein retrieving the workflow for responding to said request further comprises selecting the workflow from the plurality of workflows based on the requested certificate related action and a user type of the user.

44. (Currently Amended) One or more processor readable storage devices according to claim 43, wherein said method further ~~includes the step of~~ comprises:

(e)——receiving said plurality of workflows.

45. (Currently Amended) One or more processor readable storage devices according to claim 43, wherein said method further ~~includes the steps of~~ comprises:

(d) — performing said workflow, wherein ~~said step (d) includes the steps of performing said workflow~~ comprises:

(1) — retrieving an approval response; and

(2) — obtaining a certificate;

(e) — receiving a second request for a second certificate related action for a second user;

(f) — retrieving a second workflow for responding to said second request from said set of workflows, wherein said second workflow corresponds to said second certificate related action and a set of characteristics for said second user; and

(g) — performing said second workflow, wherein ~~said step (g) includes the step of performing said second workflow~~ comprises:

(1) — obtaining a second certificate without retrieving an approval response.

46. (Original) One or more processor readable storage devices according to claim 45, wherein said certificate related action and said second certificate related action call for the same certificate related action.

47. (Currently Amended) One or more processor readable storage devices according to claim 45, wherein ~~said steps (a), (b), (d), (e), (f), and (g)~~ receiving the request, retrieving the workflow, performing the workflow, receiving the second request, retrieving the second workflow, and performing the second workflow are performed by an Identity System in communication with an Access System.

48. (Currently Amended) An apparatus comprising:

one or more communications interfaces;

one or more storage devices; and

one or more processors in communication with said one or more storage devices and said one or more communication interfaces, said one or more processors perform a method comprising ~~the steps of~~:

(a) —receiving a request for a certificate related action for a user; and

(b) —retrieving a workflow for responding to said request from a set of workflows,

wherein said workflow corresponds to said certificate related action and a set of characteristics for said user,

wherein said set of workflows includes a plurality of workflows for responding to said certificate related action, ~~and~~

wherein each workflow in said plurality of workflows corresponds to a different set of characteristics for a user~~[[.]], and~~

wherein retrieving the workflow for responding to said request further comprises selecting the workflow from the plurality of workflows based on the requested certificate related action and a user type of the user.

49. (Currently Amended) The apparatus of claim 48, wherein said method ~~further includes the step of~~ comprises:

(e) —receiving said plurality of workflows.

50. (Currently Amended) The apparatus of claim 48, wherein said method ~~further includes the steps of~~ comprises:

(d) —performing said workflow, wherein ~~said step (d) includes the steps of~~ performing said workflow comprises:

(1) —retrieving an approval response; and

(2) —obtaining a certificate;

(e) —receiving a second request for a second certificate related action for a second user;

(f)——retrieving a second workflow for responding to said second request from said set of workflows, wherein said second workflow corresponds to said second certificate related action and a set of characteristics for said second user; and

(g)——performing said second workflow, wherein ~~said step (g) includes the step of performing said second workflow comprises:~~

(1)——obtaining a second certificate without retrieving an approval response.

51. (Original) The apparatus of claim 50, wherein said certificate related action and said second certificate related action call for the same certificate related action.

52. (Currently Amended) The apparatus of claim 50, wherein ~~said steps (a), (b), (d), (e), (f), and (g)~~ receiving the request, retrieving the workflow, performing the workflow, receiving the second request, retrieving the second workflow, and performing the second workflow are performed by an Identity System in communication with an Access System.